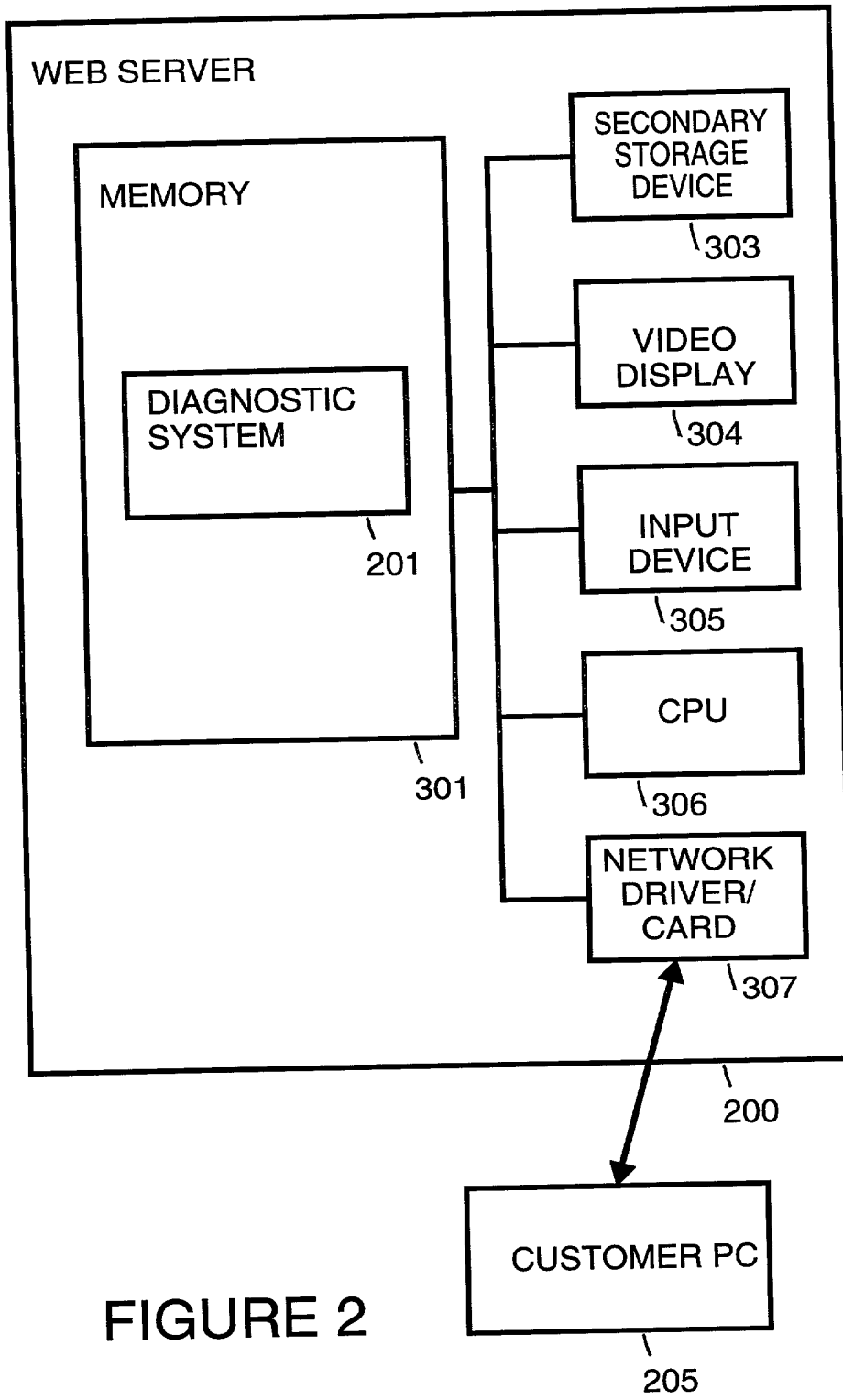


FIGURE 1



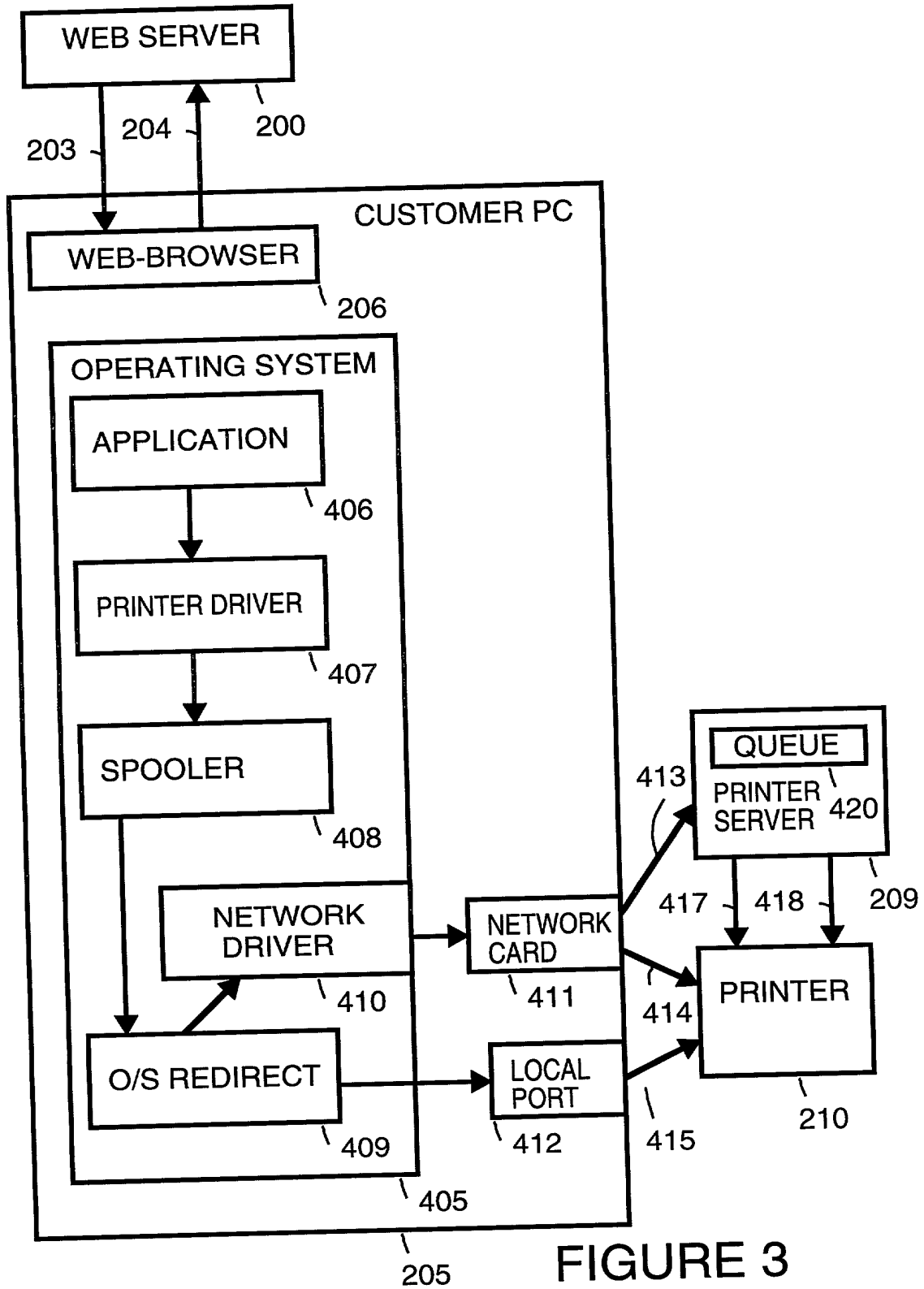


FIGURE 3

## FIGURE 4

# Main window

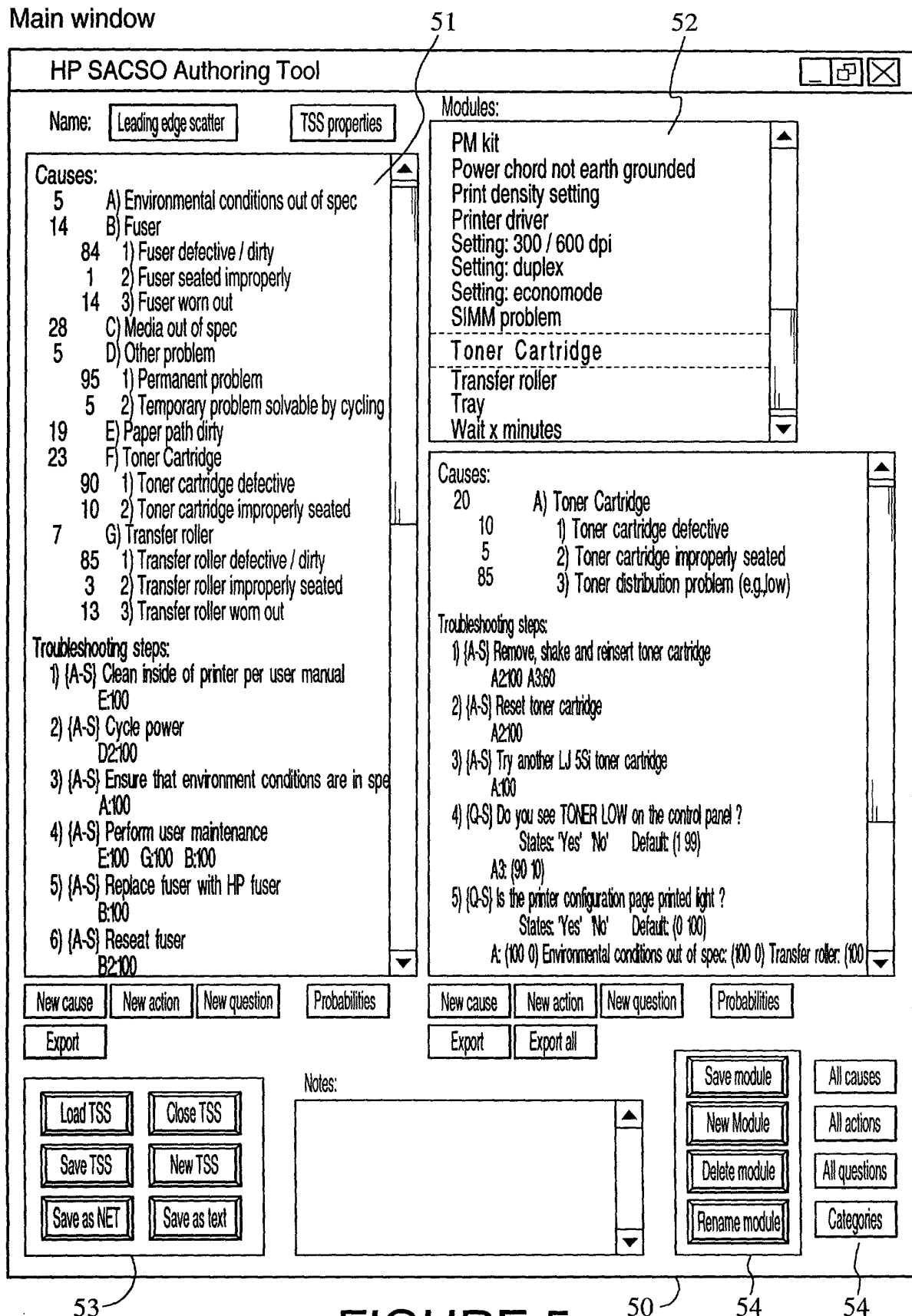


FIGURE 5

# Cause editor

Cause Editor

Name:

☐ Subcause of:

Probability:

☐ Explanation ☐ Categories ☐ Dataflow

☒ This cause is a consumable (toner cartridge, fuser, transfer roller or feed and separation rollers).

☐ Automatic data collection possible.

☐ Can be fixed by rebooting the PC.

☐ Can be fixed by power cycling the printer.

Dependency of environment:

Printer
Operating system
Printer driver
Network
Paper handling devices

Name of cause given to customers:

Delete cause OK Cancel

FIGURE 6

## Cause probability editor

Cause Probability Editor

Select level and causes:

- Environmental conditions out of spec
- Fuser
- Fuser defective / dirty
- Fuser seated improperly
- Fuser worn out
- Media out of spec
- Other problem
- Permanent problem
- Temporary problem solvable by cycling
- Paper path dirty
- Toner Cartridge
- Toner cartridge defective
- Toner cartridge improperly seated

Set probabilities:

Fuser defective / dirty	84.29
Fuser seated improperly	1.429
Fuser worn out	14.29

Normalize

OK Cancel

71

72

70

FIGURE 7

Cause category editor

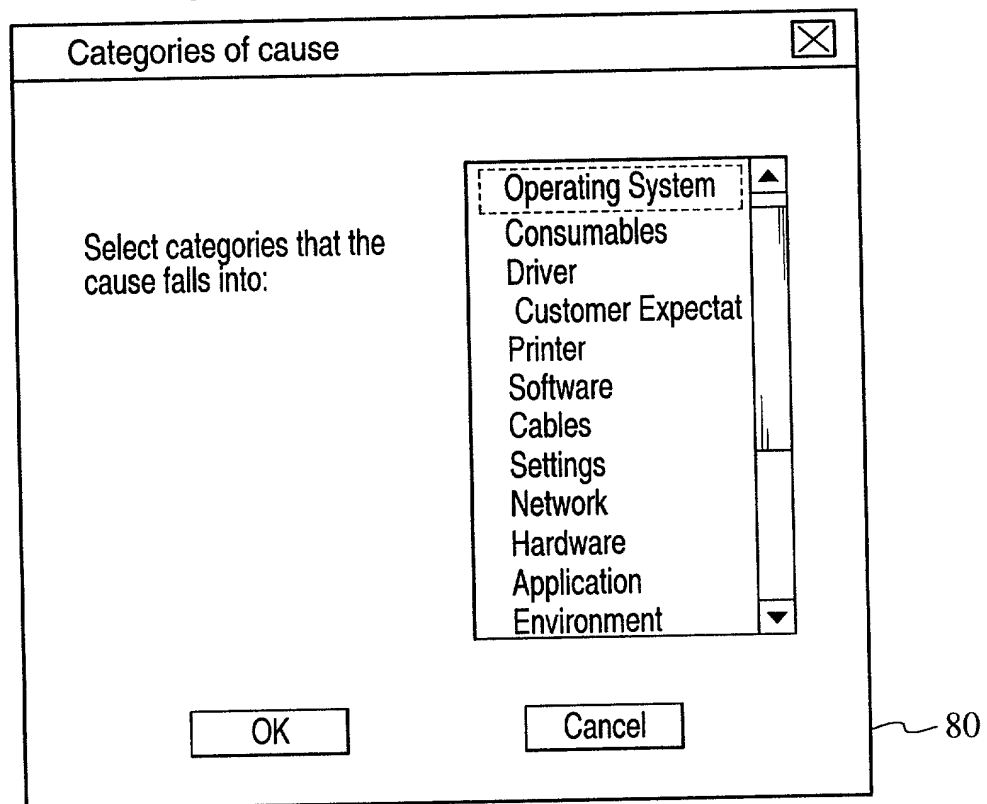


FIGURE 8



Action editor

Name: Perform user maintenance

Type: Solution action  
Information gathering action

93 ☐ Action is forced as number: 0

94 ☐ Workaround.

With probability:

100
100
100

Causes "solved" by the action:

Paper path dirty
Transfer roller
Fuser

Add cause Remove cause

Edit costs, ...

Explanation

Extra Information

☐ Reverse action - tests a single component in different environment.

Probability that it works if none of the above causes are present: 0

OK Cancel

Remove action

91 92 96 95 97 90 98 99

FIGURE 9

# Extra information editor for actions

Extra information for actions

Perform user maintenance

This action includes the following actions:

- Clean inside of printer per user manual
- Reseat fuser
- Reseat transfer roller

Add actions Remove actions

This action is mutually exclusive with the following actions:

Add actions Remove actions

☒ This action can only be performed after a specific question has been answered.

Question: Is the user maintenance due? ▼

State: Yes ▼

☐ This action can only be performed after a specific question has been answered.

Question: Did you recently perform the user mainten? ▼

State: Yes ▼

☐ If this action is performed, the following question should be fixed in the specified state.

Question: Did you recently perform the user mainten? ▼

State: Yes ▼

☐ This action includes moving a component, and will also solve the problem if this component was seated improperly.

Component (seated improperly): ▼

☐ The component should not be moved back in place afterwards.

Dependency of environment:

- Printer
- Operating system
- Printer driver
- Network
- Paper handling devices

☒ This action includes power cycling the printer.

☐ This action includes rebooting the customer's PC.

☐ This action is irreversible.

☐ Automatic data collection possible.

OK Cancel

FIGURE 10

### Action probability editor

Probability of action

Assuming that

is the only cause of

what is the probability that correctly performing the step

will solve the problem?

110

FIGURE 11

# General question editor

General question

Name: Did you recently perform the user maintenance?

States:

Yes	8
No	92

Add State

Normalize

Explanation

Edit costs, ...

Extra information

Remove question

Probability changes for causes:

5	Temporary problem solvable by cycling power
5	Environmental conditions out of spec
28	Media out of spec
7	Transfer roller
13	Transfer roller worn out
3	-> 25 Transfer roller improperly seated
85	Transfer roller defective / dirty
14	Fuser
14	Fuser worn out
84	Fuser defective / dirty
1	-> 15 Fuser seated improperly

Remove change

☐ Question is forced as number: 0

OK Cancel

120

121

122

128

126

123

124

125

126

127

FIGURE 12

# Probability change editor

Probability Change Editor

Question: Did you recently perform the user maintenance?

Cause: Transfer roller improperly seated

State: Yes

Old probability: 2.5

New probability: 25

OK

Cancel

130

132

131

133

134

135

FIGURE 13



Cause editor for actions and questions

Cost Editor

Step: Perform user maintenance

Time: 25 (minutes) ☐ Idle time?

Risk: High

Money: 0

Insult: 0

Inaccuracy: Medium

OK Cancel

152 153 154 155 156 157 150 151

FIGURE 15

Explanation editor for causes, actions and questions

Explanation Editor

Toner cartridge

Explanation:

Note:

OK Cancel

161

162

FIGURE 16